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September 27, 1993

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: MM Docket No. 93-227
RM-8292
Amendment of Section 73.202(b)
Table of Allotments, FM Broadcast Stations
Stevens Point and Marathon, Wisconsin
Eagle of Wisconsin, Inc.

Dear Mr. Caton:

On behalf of Eagle of Wisconsin, Inc., licensee of Radio Station WMGU(FM), Stevens Point, Wisconsin, we are filing herewith an original and four copies of its "Comments" in connection with the above-referenced rulemaking proceeding.

Should any questions arise with respect to this matter, please contact the undersigned counsel.

Respectfully submitted,

KAYE, SCHOLER, FIERMAN, HAYS & HANDLER

By: _____
Allan G. Moskowitz

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In Re Amendment of Section 73.202(b)	)	MM Docket No. 93-227
	)	
Table of Allotments	)	RM-8292
FM Broadcast Stations	)	
(Stevens Point and Marathon,	)	
Wisconsin)	)	

To: Chief, Policy and Rules Division

COMMENTS

Eagle of Wisconsin, Inc. ("Eagle"), licensee of Radio Station WMGU(FM), Stevens Point, Wisconsin, by its counsel, respectfully submits its Comments in support of the above-referenced proceeding, pursuant to the Commission's Notice of Proposed Rule Making ("NPRM"), released by the Commission on August 5, 1993, which proposes to substitute Channel 285A for Channel 285C3 in Marathon, Wisconsin, the reallotment of Channel 285A to Stevens Point, Wisconsin, and the modification of WMGU(FM)'s authorization accordingly. In support thereof, the following is respectfully shown.

1. As related by the NPRM, WMGU(FM) was originally licensed to operate on Channel 285A at Stevens Point, Wisconsin. At Eagle's request, Channel 285C3 was substituted for Channel 285A and the community of license changed from Stevens Point to Marathon. See, 6 FCC Rcd. 3649 (1991). Subsequently, Eagle filed an application and was granted a construction permit to

operate on Channel 285C3 at Marathon.[1] However, Eagle determined that the construction and operation of the station at Marathon was neither practical nor feasible, and filed its July 1, 1993 Petition for Rulemaking requesting the allotment (and downgrading) of the channel from Marathon back to Stevens Point. The NPRM specifically requested that Eagle provide information explaining why the allotment at Marathon was neither practical nor feasible, as well as any other information regarding the public interest benefits of this proposal.

2. Attached hereto is the Technical Statement of Lynn A. Deppen, consulting engineer to the licensee. As related by Mr. Deppen, Eagle's purpose in changing the allotment from Stevens Point to Marathon was to serve the larger Wausau, Wisconsin market. Wausau is approximately 12 miles from Marathon and has a population of 37,060 people (as opposed to 23,000 for Stevens Point). While it was determined that Rib Mountain, a large obstruction, was located between the proposed tower site for Channel 285C3 at Marathon and the community of Wausau, Eagle planned to construct an on-channel FM booster station in Wausau to alleviate the severe coverage deficiency that would result from the terrain obstruction.

3. Mr. Deppen notes that at the time, due to changes in the Commission's Rules and the manufacture of new booster

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[1] The construction permit (File No. BPH-910830ID) has been allowed to expire.

equipment, the use of an on-channel booster seemed to be a reasonable solution to Eagle's predicted coverage problem. However, as time passed, it became clear that an on-channel booster would not be a practical solution in this situation. As Mr. Deppen states, the use of FM on-channel boosters to overcome terrain blockage is only successful where extreme and total terrain blockage exists. However, this would not be the case with the proposed Channel 285C3 operation in Marathon with respect to the city of Wausau. In that situation, the city of Wausau will receive enough signal from the main facility to create too much interference with an on-channel booster facility located in Wausau, thereby severely degrading the station's signal in Wausau. However, due to the existence of the large terrain obstruction of Rib Mountain, the station's signal from its facility at Marathon to Wausau, without a booster, would also be extremely deficient. Consequently, Eagle was forced to conclude that there was no technical means to provide a broadcast quality signal to the majority of the proposed station's service area.

4. Moreover, since Wausau is served by at least three full time FM stations whose class is C1 or higher, and who will provide optimum signal coverage over Wausau, Eagle had to conclude that there was no way it could economically compete in the Wausau market from the Marathon allocation. Therefore, the

foregoing technical and market conditions convinced Eagle that the allotment at Marathon was neither practical nor feasible.

5. On the other hand, the substitution of Channel 285A for Channel 285C3 at Marathon and the reallotment of the channel to Stevens Point will allow four separate Class A FM stations to increase their facilities. On September 24, 1993, Sauk Broadcasting Corporation ("Sauk"), licensee of FM station WNFM, Reedsburg, Wisconsin, submitted "Comments" in support of the NPRM noting that WNFM's pending application (File No. BPH-930216IC) to increase its facilities to an equivalent of 6 kW is mutually contingent on the grant of the pending applications of WCFW, Chippawa Falls, Wisconsin; WLXR, La Crosse, Wisconsin; and WKBH, Trempealeau, Wisconsin. Sauk also stated that these applications, in turn, are inconsistent with the use of Channel 285C3 at Marathon, but are consistent with the proposal to reallocate Channel 285A to Stevens Point. The implementation of improvements in each of these station's facilities will allow each station to provide service to a greater number of people in their respective service areas. Additionally, WMGU(FM) presently operates as a 3 kW Class A facility on Channel 285A at Stevens Point and has never implemented its now-expired construction permit to provide Class C3 service to Marathon. By granting Eagle's instant proposal, WMGU(FM) would be able to operate as a 6 kW Class A station at Stevens Point and, consequently, improve its present service to the public. In light of the foregoing,

Eagle submits that the public interest would be served by grant of the instant proposal.

7. Eagle hereby reiterates its interest in the substitution of Channel 285A for Channel 285C3 at Marathon and the reallotment of the channel to Stevens Point; its intention to file an application for Channel 285A at Stevens Point, Wisconsin if it is allotted in this proceeding; and to promptly construct the facilities if granted.

8. In light of the foregoing, Eagle respectfully requests that the Commission issue a Report and Order to amend the FM Table of Allotments to substitute Channel 285A for Channel 285C3 at Marathon, Wisconsin, reallot Channel 285A to Stevens Point, Wisconsin, and modify WMGU(FM)'s authorization to specify operation on Channel 285A at Stevens Point, Wisconsin.

Respectfully submitted,

EAGLE OF WISCONSIN, INC.

By: _____
Allan G. Moskowitz
Its Attorney

KAYE, SCHOLER, FIERMAN, HAYS & HANDLER
901 15th Street, N.W., Suite 1100
Washington, D.C. 20005
(202) 682-3501

September 27, 1993

Exhibit No. E-1

Technical Statement in Support of
Petition for Rule Making MM Docket No. 93-227, RM-8292
Change of City of License from
Ch. 285C3 at Marathon, WI to Ch. 285A at Stevens Point, WI
Eagle of Wisconsin, Inc.

This technical statement will support the petition of Eagle of Wisconsin, Inc., ("Eagle") as to the reason for the economic infeasibility of constructing the class C3 facility on channel 285 at Marathon, Wisconsin. Eagle has never provided service to Marathon, Wisconsin and proposes to move the 285C3 allocation back to Stevens Point, Wisconsin and downgrade its operation to 6 kilowatts.

Marathon, WS Proposed Construction of 1989

Eagle's purpose in changing the allocation from Stevens Point to Marathon was to serve the Wausau, Wisconsin market. However it was discovered that Rib Mountain, a large obstruction was located between the proposed 285C3 tower site and Wausau. The plan was to contruct a main facility with an FM on-channel booster station located in Wausau, Wisconsin to alleviate a tremendous signal reception problem in the city. Rib Mountain is a large obstruction located between the proposed tower site and Wausau. Professional engineer Charles Gallagher was employed to study the situation and his two page report has three figures and is attached as Exhibit No. E-2. In the last paragraph Mr.Gallagher discusses the severe loss of signal and extreme multipath that will be provided to the city of Wausau. The population of Wausau is 37,060 persons and represents over 22 percent of the total population of 167,588 within the proposed facility's 285C3 construction permit. This would clearly be a giant hole in the proposed facility's coverage over the economic center of the area. In order to cure this severe coverage deficiency it was decided to fill in this area with an on-channel FM booster station.

The Commission's Rules had just changed allowing microwave STL facilities to feed programming to boosters and booster manufacturers were generating new equipment finely tuned to this particular application. Even though broadcasters were still experimenting with on-channel boosters and were having some positive results concerning interference, it seemed like a solution to this tremendous problem in the city of Wausau.

As time passed it was proven that the FM on-channel booster would not be a solution to this problem since only a few boosters are currently employed with semi-satisfactory results. The use of FM on-channel boosters to overcome terrain blockage only occurs when extreme and total terrain blockage exists between the station's main facility and the booster facility. However, this is not the case with the proposed 285C3 operation to Marathon, Wisconsin. The city of Wausau, Wisconsin will receive enough signal from the main facility to create too much interference with an on-channel booster facility located in Wausau. This would render the station unlistenable in the city of Wausau. However, without the on-channel booster in Wausau, the signal from the main facility will be not be as predicted, but rather signal multipath effects would be so extreme that it would cause the main facility's received signal to be unacceptably distorted and unlistenable. Therefore, we were forced to conclude that there were no technical means to provide a broadcast quality signal to the majority of the proposed station's service area.

The Radio Market

The city of Marathon, Wisconsin, with a 1990 census population of 1606 persons, cannot serve to support the proposed channel 285C3 facility. A competitive signal into Wausau, Wisconsin is necessary in order for the proposed facility to survive since it is the economic center of the area.

The interference area over Wausau is served by two full time AM stations and three FM stations in which all are licensed to Wausau, Wisconsin. Their predicted city grade signals fall over the interference area at Wausau, Wisconsin. These stations are WSAU (AM), WXCO (AM), WIFC (FM), WDEZ (FM), and WYCO (FM). The FM stations are class C1 or higher in power level and do provide as perfect a signal over the city of Wausau as technically feasible. The power levels of the AM stations are 5 kilowatts and 1 kilowatt respectively. The proposed channel 285C3 operation at Marathon, Wisconsin cannot technically compete with any of these AM or FM stations because of their excellent signal coverage into the city of Wausau.

The attached exhibits and this statement have been prepared by Lynn A. Deppen, a technical consultant for the petitioner and holder of General Radiotelephone License PG-3-9140. His qualifications are a matter of record before the Commission having been presented and accepted upon many occasions in the past. All facts and figures contained herein are true and presented to the best of my knowledge.

9/24/93
date

Lynn A. Deppen

GALLAGHER & ASSOCIATES
CONSULTING RADIO ENGINEERS

CHARLES I. GALLAGHER, P.E.
MATTHEW B. GALLAGHER

CONSULTANT TO THE FIRM
EDWARD F. LORENTZ, P.E.

5385 BROADWATER LANE
CLARKSVILLE, MD 21029
TELEPHONE (301) 531-2214
WASH. TIE LINE 854-2636

June 1, 1989

Mr. Tom Love
P. O. Box 588
Lufkin, TX 75901

Dear Tom:

In accordance with your instructions, we have investigated the potential shadow problems that would be encountered in Wausau, Wisconsin, from the possible Class C3 operation of WMGU, Stevens Point, Wisconsin. The two potential sites marked on the maps sent to us by Paul Nelson of WMGU are both located to the southwest of Wausau and were separated by only about one mile. We plotted an assumed site midway between the two sites and ran profiles of the terrain between the assumed site and Wausau. One path studied was at a bearing of 29.5° and extended through the western half of Wausau, through the fairgrounds and along the area west of the Wisconsin River. The second path studied was at 34.5° and extended along the eastern half of the city, through the courthouse and along the lower edge of the bluffs east of the river. These paths are marked on the enclosed map, Figure 3. Both paths cross Rib Mountain southwest of Wausau.

Figure 1 is a profile of the terrain along the 29.5° radial from the assumed site to Wausau. Figure 2 is a profile of the terrain at 34.5° for the same path. Both radials cross Rib Mountain at elevations of between 1650 feet and 1550 feet above mean sea level. Wausau lies beyond this ridge at elevations between 1170 feet and 1400 feet above mean sea level. Most of the city is below 1250 feet above sea level, 300 to 400 feet below the obstruction created by Rib Mountain. Only the area south of Town Line Road and east of the Wausau River would escape the shadowing effect of Rib Mountain. The center of radiation shown on the profile graphs is based on an antenna height of 100 metres (328 feet) above average terrain. In order to provide line-of-sight to most of Wausau, the antenna would have to be 1200 to 1300 feet above ground level.

In the absence of the obstruction created by Rib Mountain, the calculated field strength (FCC Methods) in Wausau would be between 70 dBu and 76 dBu. Shadow loss calculations indicate a median loss of 10 dB. This would mean that at 50% of the locations the field strength would be 60 dBu to 66 dBu. However, even in the absence of multipath, the field strength at 10% of the locations would be another 10 dB lower, or between 50 dBu and 56 dBu. Multipath will be a serious problem. The bluffs southeast of the city will be line of sight to the transmitting site and the field strength will be between 70 dBu and 90 dBu. Reflections off these hills into the city will create serious multipath effects.

In conclusion, it is my opinion that the shadow losses due to the major obstruction to line of sight into Wausau and the potential multipath situation would result in very inferior service to Wausau from the transmitting site area dictated by the Class C3 site restrictions.

If you have any questions, do not hesitate to call.

Sincerely,

Charlie

Charles I. Gallagher

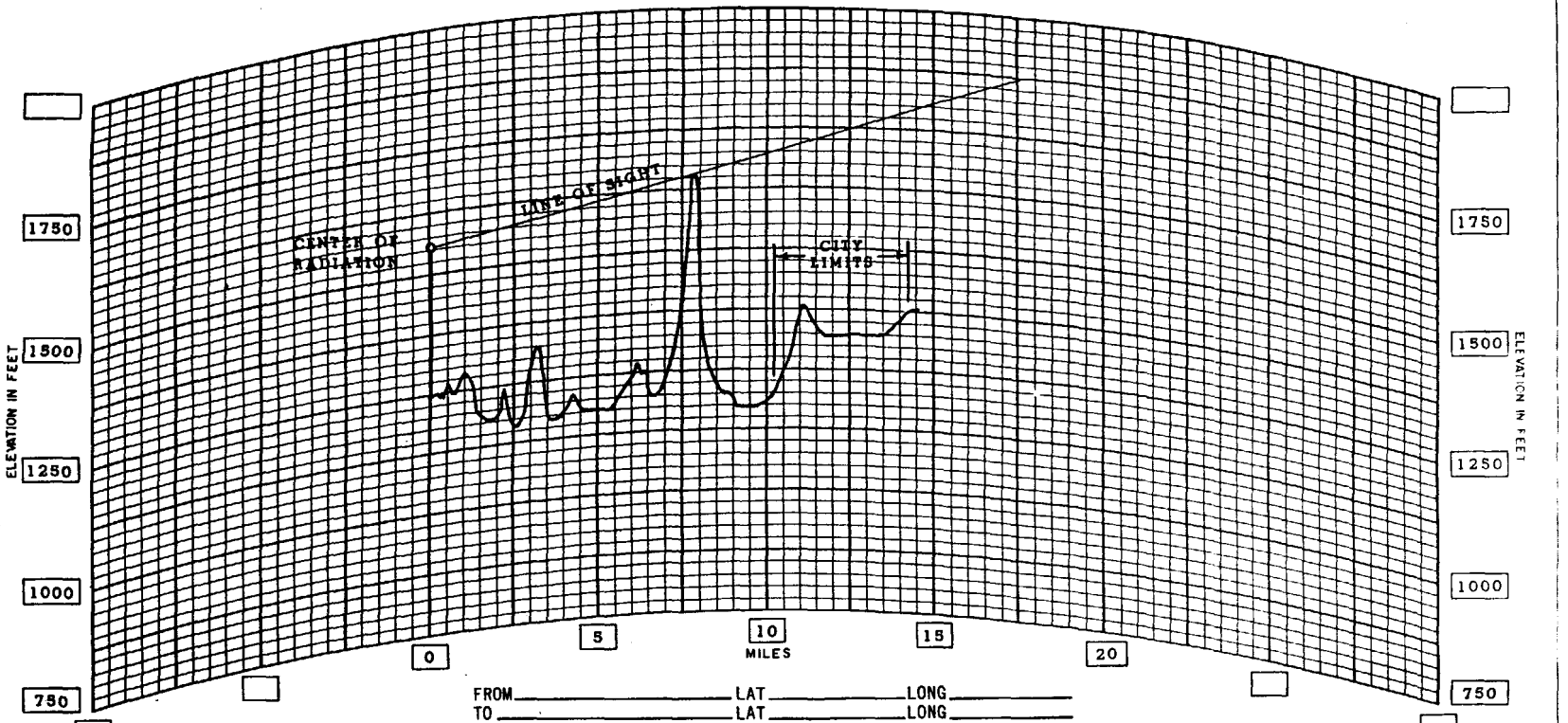
CIG:mg
Enclosure

cc: Lynn Deppen

29.5°

PROFILE
BASED ON 1.33 X EARTH'S RADIUS

FIGURE 1



MAJOR SCALE DIVISIONS	
HORIZONTAL	VERTICAL
5 MILES	250 FEET
10 MILES	1000 FEET

FROM _____ LAT _____ LONG _____
TO _____ LAT _____ LONG _____
SOURCE DATA _____ DATE _____

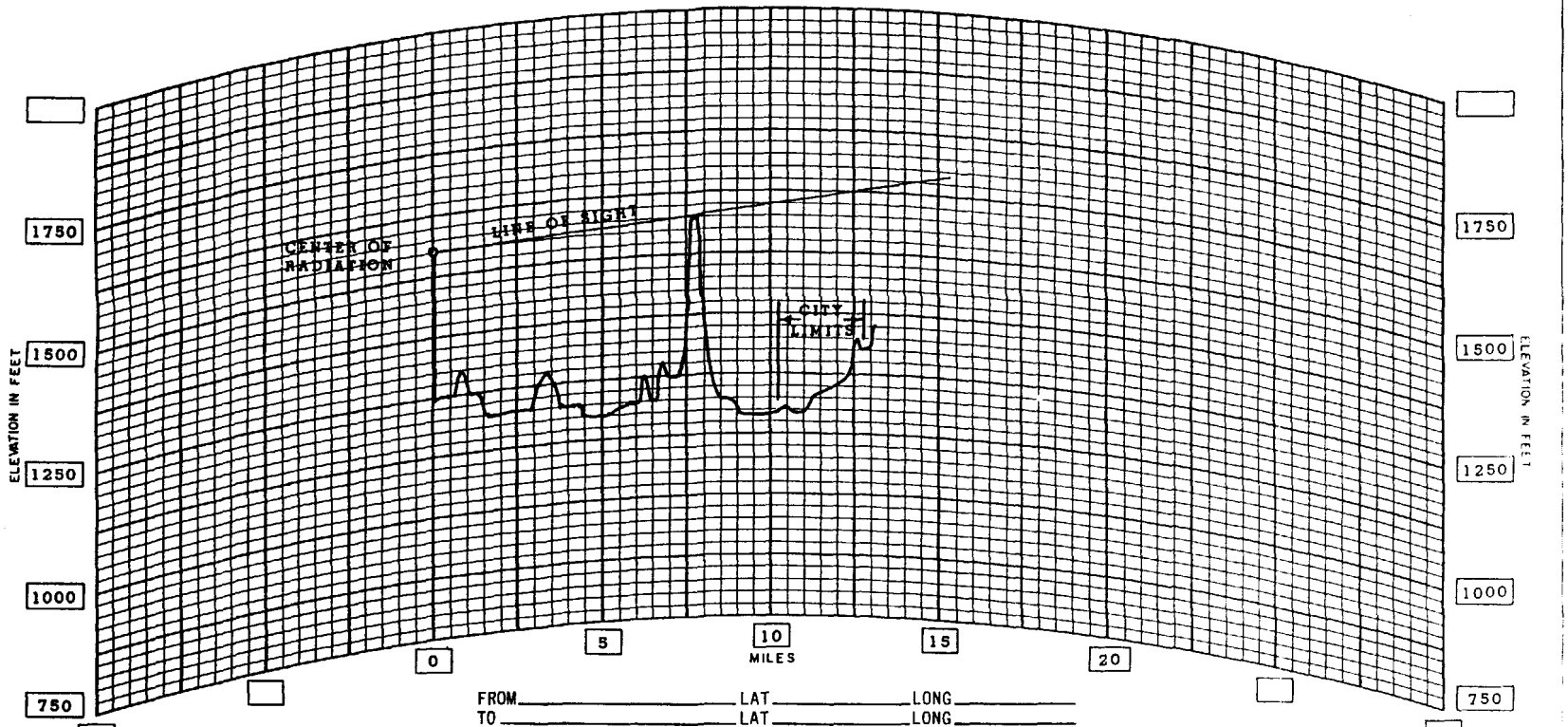
GALLAGHER & ASSOCIATES
CONSULTING RADIO ENGINEERS CLARKSVILLE MD

34.5°

PROFILE

BASED ON 1.33 X EARTH'S RADIUS

FIGURE 2



MAJOR SCALE DIVISIONS	
HORIZONTAL	VERTICAL
5 MILES	250 FEET
10 MILES	1000 FEET

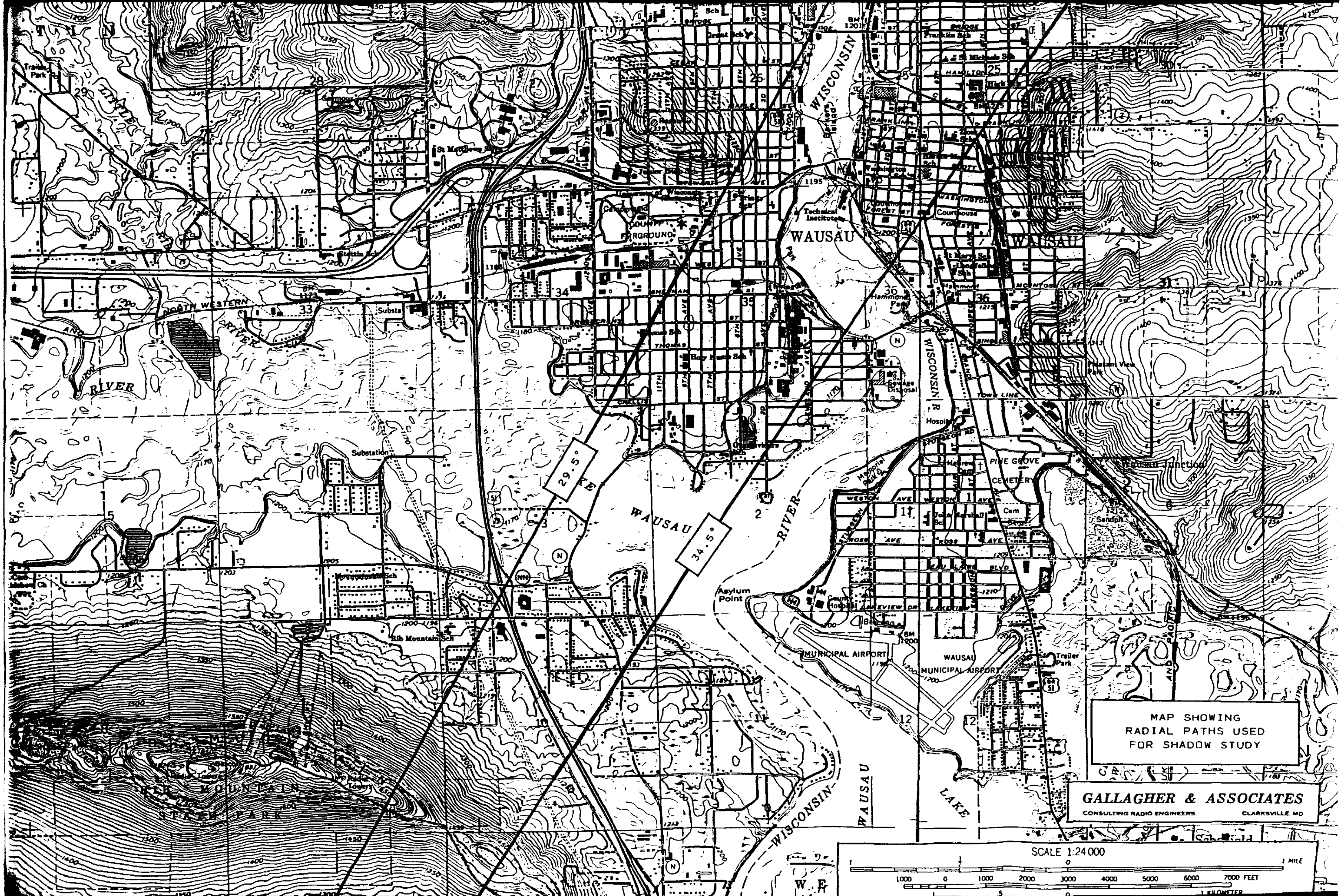
FROM _____ LAT _____ LONG _____

TO _____ LAT _____ LONG _____

SOURCE DATA _____ DATE _____

GALLAGHER & ASSOCIATES

CONSULTING RADIO ENGINEERS CLARKSVILLE MD



MAP SHOWING
RADIAL PATHS USED
FOR SHADOW STUDY
GALLAGHER & ASSOCIATES
CONSULTING RADIO ENGINEERS
CLARKSVILLE MD
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
29.5°
34.5°
WAUSAU
WISCONSIN
RIVER
LAKE
WAUSAU MUNICIPAL AIRPORT
Asylum Point
PINE GROVE CEMETERY
FAIRGROUND
Technical Institute
Courthouse
Wausau Junction
Rib Mountain Sch
Substation
Trailer Park
NORTH WESTERN

CERTIFICATE OF SERVICE

I, Diane E. Bateman, a secretary with the law firm of Kaye, Scholer, Fierman, Hays & Handler, do hereby certify that a copy of the foregoing "Comments" was delivered via U.S. First Class Mail, postage prepaid, this 27th day of September, 1993, to the following:

Ms. Kathleen Scheuerle *
Allocations Branch
Mass Media Bureau
Federal Communications Commission
2025 M Street, N.W., Room 8314
Washington, D.C. 20554

Mr. Douglas W. Webbink, Chief *
Policy and Rules Division
Mass Media Bureau
Federal Communications Commission
2025 M Street, N.W., Room 8010
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Diane E. Bateman

Diane E. Bateman

* via Hand-Delivery